

Health Science Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs

**Handbook for Teacher Educators
and Program Reviewers**



**California Commission on Teacher Credentialing
State of California**

1 9 9 9

Health Science Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs

**Created and Recommended by the
Health Science Teacher Preparation
and Assessment Advisory Panel
(1995-1996)**



**Printed and Distributed by the
California Commission on Teacher Credentialing
State of California
1900 Capitol Avenue
Sacramento, California
1999**

**The mission of the
California Commission on Teacher Credentialing
is to maintain and enhance quality
while encouraging innovation and creativity
in the preparation and assessment . . .
of professional educators
for California's schools.**

The California Commission on Teacher Credentialing

State of California

Gray Davis, Governor

1999

Members of the Commission

Torrie L. Norton, Chairperson	Elementary School Teacher
Gary Reed, Vice Chairperson	Public Member
Melodie Blowers	School Board Member
Verna B. Dauterive	School Principal
Carolyn L. Ellner	Postsecondary Education Member
Scott Harvey	Public Member
Carol Katzman	Office of the Superintendent of Public Instruction
Helen Lee	Public Member
Doris Miner	School Counselor
Edmund Sutro	High School Teacher
Jane Veneman	Special Education Teacher
Nancy Zarenda	Elementary School Teacher

Ex-Officio Members

Edward DeRoche	Association of Independent California Colleges and Universities
Bill Wilson	California State University
Elizabeth Graybill	California Postsecondary Education Commission
Jon Snyder	Regents, University of California

Executive Officer

Sam W. Swofford	Executive Director
-----------------	--------------------

**The Health Science Teacher
Preparation and Assessment Advisory Panel
California Commission on Teacher Credentialing
1996**

Panelists	Professional Positions	Educational Organizations
Michael Allen	Educator & Consultant Health Educators & Los Angeles	California Association of School County Office of Education
Gary Estep	Health Science Teacher	Chico Junior High School
Carolyn Fisher	Coordinator, Comprehensive Health Programs	San Joaquin County Office of Education
Susan Giarratano	Professor, Health Science Department	California State University, Long Beach
Barbara Johnson	Teacher, Health & Home Economics	Watsonville High School
Ric Loya	Health Science Teacher	Huntington Park High School
John Orta	Professor, Health & Nutritional Sciences Department	California State University, Los Angeles
Melinda Seid	Professor, Health & Safety Studies	California State University, Sacramento
Sherman Sowby	Professor, Health Science Department	California State University, Fresno
Patricia Twyman	Director, Health Occupations Center District, Adult Education	Grossmont Union High School
Darlene Yee	Professor, Gerontology, Health and Human Services Department	San Francisco State University
<hr/>		
Mary Vixie Sandy	Commission Consultant to the Advisory Panel	
Bobbie Fite	Commission Licensing Advisor to the Advisory Panel	
Shirley Holder Hazlett	California Department of Education, Healthy Kids, Healthy California Office	
Stephanie Gertz	Representative, National Evaluation Systems, Inc.	

Health Science Teacher Preparation in California: Standards of Quality and Effectiveness for Subject Matter Programs

Contents

Part 1: Introduction to Health Science Teaching Standards.....1

Standards and Credentials for Teachers of Health Science:

Foreword by the California Commission on Teacher Credentialing.....	3
The Health Science Teaching Credential.....	4
Standards of Program Quality and Effectiveness.....	4
Analysis and Adoption of the Health Science Program Standards.....	7
Alignment of Program Standards and Subject Matter Assessments.....	7
Standards for Professional Teacher Preparation Programs.....	8
Subject Matter Standards for Prospective Elementary School Teachers.....	8
Overview of the Health Science Standards Handbook.....	9
Contributions of the Health Science Advisory Panel.....	9
Request for Assistance from Handbook Users.....	9

Part 2: Standards of Program Quality for Health Science Teaching.....10

Definitions of Key Terms.....12

Preconditions for the Approval of Subject Matter Programs in Health Science.....13

Category I: Curriculum and Content of the Program.....14

Standard 1: Program Philosophy and Purpose.....	14
Standard 2: Scientific and Behavioral Foundations.....	15
Standard 3: Personal Health, Physical Activity, and Lifelong Well-Being.....	16
Standard 4: Nutrition and Dietary Practices.....	18
Standard 5: Alcohol, Tobacco, and Other Drugs.....	19
Standard 6: Family Life and Relationships.....	20
Standard 7: Injury and Violence Prevention and Safety Promotion.....	21
Standard 8: Consumer Health, Culture, Media, and Technology.....	22
Standard 9: Professionalism and Ethics.....	24
Standard 10: Comprehensive School Health System (CSHS).....	25
Standard 11: Disease Prevention, Risk Reduction, and Health Promotion.....	26
Standard 12: Diversity and Equity in the Program.....	27

Category II: Essential Features of Program Quality.....28

Standard 13: Coordination of the Program.....	28
Standard 14: Student Advisement and Support.....	29
Standard 15: Assessment of Subject Matter Competence.....	30
Standard 16: Program Review and Development.....	31

Specifications for the Subject Matter Knowledge and Competence of Prospective Teachers of Health Science.....	32
--	----

Part 3: Implementation of Health Science Teaching Standards.....39

Transition to Quality Standards for All Teaching Credentials.....	41
Improvements in the Review of Subject Matter Programs.....	42
Alignment of Program Standards and Performance Assessments.....	42
Validity and Authenticity of Subject Matter Assessments.....	43
New Terminology for "Waiver Programs".....	43
Ongoing Review and Approval of Subject Matter Programs.....	44
Review and Improvement of Subject Matter Standards.....	44

Health Science Teacher Preparation: Commission Timeline for Implementation of Standards.....	45
---	----

Implementation Timeline: Implications for Prospective Teachers.....	46
Implementation Timeline Diagram.....	47

Implementation Handbook: Review and Approval of Subject Matter Programs in Health Science.....	48
---	----

Initial Statement of Institutional Intent.....	48
The Program Proposal Document.....	49
Steps in the Review of Programs.....	49
Responses to Six Common Standards.....	51
Selection, Composition and Training of Program Review Panels.....	51
Subject Matter Program Review Panel Procedures.....	52
Subject Matter Review Panel Reports.....	52

Further Information and Communications Related to Standards and Programs.....	53
Regional Workshops for Colleges and Universities.....	53
Communications with the Commission's Staff and Program Review Panel.....	53
Request for Assistance from Handbook Users.....	53

Part 1

Introduction to

Health Science Teaching Standards



Standards and Credentials for Teachers of Health Science:

Foreword by the

California Commission on Teacher Credentialing

One of the purposes of education is to enable students to learn the important subjects of the school curriculum, including health science. Each year in California, thousands of students enroll in health science classes with teachers who are certified by the California Commission on Teacher Credentialing to teach those classes in public schools. The extent to which these students attain health science knowledge and skills depends substantially on the quality of the preparation of their teachers in health science and on the teaching of health science.

The Commission is the agency of California government that certifies the competence of teachers and other professionals who serve in the public schools. As a policymaking body that establishes and maintains standards for the education profession in the state, the Commission is concerned about the quality and effectiveness of the preparation of teachers and other school practitioners. On behalf of students, the education profession, and the general public, the Commission's most important responsibility is to establish and implement strong, effective standards of quality for the preparation and assessment of future teachers.

In 1988 and 1992, the legislature and the governor enacted laws that strengthened the professional character of the Commission and enhanced its authority to establish rigorous standards for the preparation and assessment of prospective teachers. As a result of these reform laws (Senate Bills 148 and 1422, Bergeson), a majority of the Commission members are professional educators, and the agency is responsible for establishing acceptable levels of quality in teacher preparation and acceptable levels of competence in beginning teachers. To implement the reform statutes, the Commission is developing new standards and other policies collaboratively with representatives of postsecondary institutions and statewide leaders of the education profession.

To ensure that future teachers of health science have the finest possible education, the Commission decided to establish a panel of experts to review recent developments in health science education and to recommend new standards for the academic preparation of health science teachers in California. The Commission's executive director invited colleges, universities, professional organizations, school districts, county offices of education, and other state agencies to nominate distinguished professionals to serve on this panel. After receiving nominations, the executive director appointed the Health Science Teacher Preparation and Assessment Advisory Panel (see page ii). These eleven professionals were selected for their expertise in health science education, their effectiveness as teachers and professors of health science, and their leadership in the health science education field. The panel was also selected to represent the diversity of California educators and includes health science teachers as well as university professors. The panel met on several occasions during 1995 to discuss, draft, and develop the standards in this handbook. The Commission is grateful to the panelists for their conscientious work in addressing many complex issues related to excellence in the subject matter preparation of health science teachers.

The Health Science Teaching Credential

The Single Subject Teaching Credential in Health Science authorizes an individual to teach health science classes in departmentalized settings. The holders of this credential may teach at any grade level and may serve as health science specialists in elementary schools, but the majority of departmentalized health science classes occur in grades 7 through 12.

An applicant for a Single Subject Teaching Credential must demonstrate subject matter competence in one of two ways. The applicant may earn a passing score on a subject matter examination that has been adopted by the Commission. Alternatively, the prospective teacher may complete a subject matter preparation program that has been approved by the Commission (Education Code Sections 44280 and 44310). Regionally accredited colleges and universities that wish to offer subject matter programs for prospective teachers must submit those programs to the Commission for approval.

In California, subject matter preparation programs for prospective teachers are not the same as undergraduate degree programs. Postsecondary institutions govern academic programs that lead to the award of degrees, including baccalaureate degrees in health science. The Commission sets standards for academic programs that lead to the issuance of credentials, including the Single Subject Teaching Credential in Health Science. An applicant for a teaching credential must have earned a bachelor's degree from an accredited institution, but the degree may be in a subject other than the one to appear on the credential. Similarly, degree programs for undergraduate students in health science may or may not fulfill the Commission's standards for subject matter preparation. Completing a subject matter program that satisfies the standards enables a candidate to qualify for the Single Subject Credential in Health Science.

The Commission asked the Health Science Teacher Preparation and Assessment Advisory Panel to create new standards of program quality and effectiveness that could be used to review and approve subject matter preparation programs. The Commission requested the development of standards to emphasize the knowledge, skills and perspectives that teachers must have learned in order to be effective in teaching the subjects that are most commonly included in health science courses in the public schools of California.

Standards of Program Quality and Effectiveness

In recent years, the Commission has thoroughly redesigned its policies regarding the preparation of education professionals and the review of preparation programs in colleges and universities. In initiating these reforms, the Commission embraced the following principles or premises regarding the governance of educator preparation programs. The Commission asked the Health Science Teacher Preparation and Assessment Advisory Panel to apply these general principles to the task of creating standards for subject matter programs in health science.

- (1) *The status of teacher preparation programs in colleges and universities should be determined on the basis of standards that relate to significant aspects of the quality of those programs.* Program quality may depend on the presence or absence of specified features of programs, so some standards require the presence or absence of these features. It is more common, however, for the quality of educational programs to depend on *how well* the program's features have been designed and implemented in practice. For this reason, most of the Commission's program standards define levels of quality in program features.

- (2) *There are many ways in which a teacher preparation program can be excellent.* Different programs are planned and implemented differently and are acceptable if they are planned and implemented well. The Commission's standards are intended to differentiate between good and poor programs. The standards do not require all programs to be alike, except in their quality, which assumes different forms in different environments.
- (3) *The curriculum of teacher education plays a central role in a program's quality.* The Commission adopts curriculum standards that attend to the most significant aspects of knowledge and competence. The standards do not prescribe particular configurations of courses, or particular ways of organizing content in courses, unless professionals on an advisory panel have determined that such configurations are essential for a good curriculum. Similarly, curriculum standards do not assign unit values to particular domains of study unless there is a professional consensus that it is essential for the Commission's standards to do so. Curriculum standards for health science teacher preparation are listed as Standards 1 through 12 in this handbook.
- (4) *Teacher education programs should prepare candidates to teach the public school curriculum effectively.* The Commission asked the Health Science Advisory Panel to examine and discuss the *Health Framework for California Public Schools, Kindergarten Through Grade Twelve*, as well as other state curriculum policies in health science education. The major themes and emphases of subject matter programs for teachers must be congruent with the major strands and goals of the school curriculum. It is also important for future teachers to be in a position to *improve* the school curriculum on the basis of new developments in the scholarly disciplines and in response to changes in student populations and community needs. However, it is indispensable that the Commission's standards give emphasis to the subjects and topics that are most commonly taught in public schools.
- (5) *In California's public schools, the student population is so diverse that the preparation of educators to teach culturally diverse students cannot be the exclusive responsibility of professional preparation programs in schools of education.* This preparation must begin early in the collegiate experience of prospective teachers. The Commission expects subject matter preparation programs to contribute to this preparation, and asked the Health Science Advisory Panel to recommend an appropriate program standard. The panel concurred with this request and recommended Standard 12 in Part 2 of this handbook.
- (6) *The curriculum of a teacher education program should be based on an explicit statement of purpose and philosophy. An excellent program also includes student services and policies such as advisement services and admission policies.* These components of teacher preparation contribute significantly to the quality of the program; they make the program more than a collection of courses. The Commission asked the Health Science Advisory Panel to develop standards related to (a) the philosophy and purpose of health science teacher preparation and (b) significant, noncurricular components of teacher preparation, to complement the curriculum standards. Again the panel concurred, and Standards 1 and 13 through 16 are the result.

- (7) *The assessment of each student's attainments in a teacher education program is a significant responsibility of the institution that offers the program.* This assessment should go beyond a review of transcripts to verify that acceptable grades have been earned in required and elective courses. The specific form, content and methodology of the assessment should be determined by the institution. In each credential category, the Commission's standards attend to the overall quality of institutional assessments of students in programs. Standard 15 in this document is consistent with this policy of the Commission.
- (8) *The Commission's standards of program quality allow quality to assume different forms in different environments.* The Commission did not ask the advisory panel to define all of the acceptable ways in which programs could satisfy a quality standard. The standards should define *how well* programs must be designed and implemented; they must not define specifically and precisely *how* programs should be designed or implemented.
- (9) *The Commission's standards of program quality are roughly equivalent in breadth and importance.* Each standard is accompanied by a rationale that states briefly why the standard is important to the quality of teacher education. The standards should be written in clear, plain terms that are widely understood.
- (10) *The Commission assists in the interpretation of the standards by identifying the important factors that should be considered when a program's quality is judged.* The Commission's adopted standards of program quality are mandatory; each program must satisfy each standard. "Factors to Consider" are not mandatory in the same sense, however. These factors suggest the types of questions that program reviewers ask and the types of evidence they will assemble and consider when they judge whether a standard is met. Factors to consider are not "mini-standards" that programs must meet. The Commission expects reviewers to weigh the strengths and weaknesses of a program as they determine whether a program meets a standard. The Commission does not expect every program to be excellent in relation to every factor that could be considered.
- (11) *Whether a particular program fulfills the Commission's standards is a judgment that is made by professionals who have been trained in interpreting the standards.* Neither the Commission nor its professional staff make these judgments without relying on subject matter experts who are trained in program review and evaluation. The review process is designed to ensure that subject matter programs fulfill the Commission's standards initially and over the course of time.

The Commission fulfills one of its responsibilities to the public and the profession by adopting and implementing standards of program quality and effectiveness. While assuring the public that educator preparation is excellent, the Commission respects the considered judgments of educational institutions and professional educators, and holds educators accountable for excellence. The premises and principles outlined above reflect the Commission's approach to fulfilling its responsibilities under the law.

Analysis and Adoption of the Health Science Program Standards

The Health Science Teacher Preparation and Assessment Advisory Panel drafted the program quality standards and a set of preconditions for program approval during three two-day meetings in 1995. Meeting in public, the Commission then reviewed and discussed the draft standards and preconditions, as well as a draft plan for implementing the standards. The Commission distributed the draft standards, preconditions, and implementation plan to health science educators throughout California, with a request for comments and suggestions. The draft standards and other policy proposals were forwarded to:

- Academic administrators of California colleges and universities;
- Chairpersons of Health Science Departments in colleges and universities;
- Deans of Education in California colleges and universities;
- Presidents of professional associations of health science teachers; and
- Health Science professors, teachers and specialists.

The Commission asked 120 middle and high school principals to forward the draft policies to health science teachers and curriculum specialists for their analysis and comments.

After allowing a period for public comments, the Commission's professional staff compiled the responses to each standard and precondition, as well as comments about the implementation plan, which were reviewed thoroughly by the Advisory Panel. The panel exercised its discretion in responding to the suggestions, and made minor changes in the draft standards and preconditions. On February 1, 1996, the Advisory Panel presented the completed standards, preconditions, and implementation plan to the Commission, which adopted them on February 2, 1996.

Alignment of Program Standards and Subject Matter Assessments

Since the inception of the Single Subject Credential in Health Science in 1983, applicants for the health science credential have not had the option of meeting the subject matter competency requirement by taking an examination. Prospective teachers of health science have qualified for credentials only by completing programs of subject matter study that were approved by the Commission.

The Commission awarded a contract to National Evaluations Systems, Inc. (NES) in January 1995, to develop new single subject examinations that align with the subject matter program standards. The Commission and NES asked the Health Science Advisory Panel to develop subject matter assessment specifications that would be as parallel and equivalent as possible with the new subject matter program standards in this handbook. These assessment specifications will guide the scope and content of test items in the development of the health science examination.

The advisory panel's draft specifications were disseminated to 205 health science teachers, professors, and curriculum specialists throughout California to determine their relatedness to the job of a health science teacher. Following an extensive review of the draft specifications, the panel made minor revisions and the completed specifications were adopted by the Commission on February 2, 1996.

These specifications are now the basis for the health science examination being developed by NES, which will include both a multiple-choice and a constructed-response component. This examination will be designed to assess a candidate's health science knowledge and skills, and the ability to respond critically to complex problems and situations encountered in the field of health science. Candidates who seek to qualify for the Single Subject Credential in Health Science by examination will be required to pass the Single Subject Assessment for Teachers (SSAT) in Health Science beginning with the first test administration in October 1996.

The Commission's new *Specifications for the Assessment of Subject Matter Knowledge and Competence in Health Science* are included in this handbook (pages 32 through 38) to serve as a resource in the design and evaluation of subject matter programs for future teachers of health science.

Standards for Professional Teacher Preparation Programs

The effectiveness of health science education in California schools does not depend entirely on the subject matter preparation of health science teachers. Another critical factor is the teacher's ability to *teach* health science. To address the *pedagogical* knowledge and effectiveness of health science teachers, the Commission adopted and implemented *Standards of Program Quality and Effectiveness for Professional Teacher Preparation Programs*. These thirty-two standards define levels of quality and effectiveness that the Commission expects of teacher education programs that are offered by schools of education. These standards originated in Commission-sponsored research as well as the published literature on teacher education and teacher effectiveness. Approximately 1,500 educators from all levels of public and private education participated in developing the standards during a two-year period of dialogue and advice. The standards are now the basis for determining the status of professional preparation programs for Single Subject Teaching Credentials in California colleges and universities. The Commission also adopted special standards for future teachers who intend to teach students with limited English skills in the schools. The standards in this handbook have been prepared for subject matter programs, and are designed to complement the Commission's existing standards for programs of pedagogical preparation.

Subject Matter Standards for Prospective Elementary School Teachers

Elementary school teachers are expected to establish foundations of knowledge, skills, and attitudes that young students need in order to succeed in more advanced classes in secondary schools. To address the preparation of future classroom teachers in elementary schools, the Commission appointed an advisory panel to develop new *Standards of Program Quality for the Subject Matter Preparation of Elementary Teachers*. Following a thorough process of research, development and consultation, the Commission adopted these standards, which relate to (1) the broad range of subjects that elementary teachers must learn, and (2) the essential features and qualities of programs offered in liberal arts departments. The Commission appointed and trained two professional review panels, which have examined 72 subject matter programs for prospective elementary teachers, and have recommended 62 of these programs for approval by the Commission. As a result of this reform initiative, approximately 25,000 prospective elementary teachers are now enrolled in undergraduate programs that meet high standards of quality for subject matter preparation across a broad range of disciplines.

Overview of the Health Science Standards Handbook

Part 2 of the handbook includes the twenty basic standards for health science, and the Advisory Panel's *Specifications for the Subject Matter Knowledge and Competence of Prospective Teachers of Health Science*. Part 3 of the handbook provides information about implementation of the new standards in California colleges and universities.

Contributions of the Health Science Advisory Panel

The California Commission on Teacher Credentialing is indebted to the Health Science Teacher Preparation and Assessment Advisory Panel for the successful creation of *Standards of Program Quality and Effectiveness for the Subject Matter Preparation of Health Science Teachers*. The Commission believes strongly that the panel's standards will improve the teaching and learning of health science in public schools.

Request for Assistance from Handbook Users

The Commission periodically reviews its policies, in part on the basis of responses from colleges, universities, school districts, county offices, professional organizations and individual professionals. The Commission welcomes all comments about the standards and information in this handbook, which should be addressed to:

California Commission on Teacher Credentialing
Professional Services Division
1900 Capitol Avenue
Sacramento, California 95814-4213

Part 2

Standards of Program Quality and Effectiveness in Health Science



Definitions of Key Terms

Standard

A "standard" is a statement of program quality that must be fulfilled for initial or continued approval of a subject matter program by the Commission. In each standard, the Commission has described an acceptable level of quality in a significant aspect of health science teacher preparation. The Commission determines whether a program satisfies a standard on the basis of an intensive review of all available information related to the standard by a review panel whose members (1) have expertise in health science teacher preparation, (2) have been trained in the consistent application of the standards, and (3) submit a recommendation to the Commission regarding program approval.

The Commission's adopted Standards of Program Quality and Effectiveness for Subject Matter Programs in Health Science begin on page 14 of this handbook. The Commission's authority to establish and implement the standards derives from Section 44259 (b) (5) of the California Education Code.

Factors to Consider

"Factors to Consider" serve to guide program review panels in judging the quality of a program in relation to a standard. Within the scope of a standard, each factor defines a dimension along which programs vary in quality. The factors identify the dimensions of program quality that the Commission considers to be important. To enable a program review panel to understand a program fully, a college or university may identify additional quality factors and may show how the program fulfills these added indicators of quality. In determining whether a program fulfills a given standard, the Commission expects the review panel to consider all of the related quality factors in conjunction with each other. In considering the several quality factors for a standard, excellence in one factor compensates for less attention to another indicator by the institution. For subject matter programs in health science, the adopted Factors to Consider begin on page 14.

Precondition

A "precondition" is a requirement for initial and continued program approval that is based on California state laws or administrative regulations. Unlike standards, preconditions specify requirements for program compliance, not program quality. The Commission determines whether a program complies with the adopted preconditions on the basis of a program document provided by the college or university. In the program review sequence, a program that meets all preconditions is eligible for a more intensive review to determine if the program's quality satisfies the Commission's standards. Preconditions for the approval of subject matter programs in health science are on page 13. Details regarding the program review sequence are on pages 48 through 53.

Preconditions for the Approval of Subject Matter Programs in Health Science

To be approved by the Commission, a Subject Matter Program in Health Science must comply with the following preconditions, which are based on California Administrative Code Sections 80085.1 and 80086. The Commission's statutory authority to establish and enforce the preconditions is based on Sections 44259 and 44310 through 44312 of the California Education Code.

- (1) Each Program of Subject Matter Preparation for the Single Subject Teaching Credential in Health Science shall include (a) at least 30 semester units (or 45 quarter units) of core coursework in health science subjects and related subjects that are commonly taught in departmentalized classes in California public schools, and (b) a minimum of 15 semester units (or 22 quarter units) of coursework that provides breadth and perspective to supplement the essential core of the program. These two requirements are elaborated in Preconditions 2 and 3 below.
- (2) The basic core of the program shall include coursework in (or directly related to) subjects that are commonly taught in departmentalized classes of health science and related subjects in the public schools, including coursework in health education and the Comprehensive School Health System, alcohol, tobacco and other drug education, family life education, sexually transmitted disease education (including HIV/AIDS education), nutrition, disease prevention/health promotion, and legislative mandates.

In addition to describing how a program meets each standard of program quality in this handbook, the program document by an institution shall include a listing and catalog description of all courses that constitute the basic core of the program. Institutions shall have flexibility to define the core in terms of specifically required coursework or elective courses related to each commonly taught subject. Institutions may also determine whether the core consists of one or more distinct courses for each commonly taught subject or courses offering integrated coverage of these subjects.

- (3) Additional coursework in the program shall be designed to provide breadth and perspective to supplement the essential core of the program.

A program document shall include a listing and catalog description of all courses that are offered for the purposes of breadth and perspective. Institutions may define this program component in terms of required or elective coursework.

Coursework offered by any appropriate department(s) of a regionally accredited institution may satisfy the preconditions and standards in this handbook.

Standards of Program Quality and Effectiveness

Category I: Curriculum and Content of the Program

Standard 1

Program Philosophy and Purpose

The subject matter preparation program in health science is based on an explicit statement of program philosophy that expresses its purpose, design, and desired outcomes, and defines the institution's concept of a well-prepared teacher of health science. The program philosophy, design, and desired outcomes are appropriate for preparing students to teach health science in California schools.

Rationale for Standard 1

To ensure that a subject matter program is appropriate for prospective teachers, it must have an explicit statement of philosophy that expresses the institution's concept of a well-prepared teacher of the subject. This statement provides direction for program design, and it assists the faculty in identifying program needs and emphases, developing course sequences, and conducting program reviews. The philosophy statement also informs students of the basis for program design and communicates the institution's aims to school districts, prospective faculty members, and the public. The responsiveness of a program's philosophy, design, and desired outcomes to the contemporary conditions of California schools are critical aspects of its quality.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which:

- The program philosophy, design, and desired outcomes are collectively developed by participating faculty; reflect an awareness of recent paradigms and research in the discipline of health science; and are consistent with each other.
- The program philosophy is consistent with the major themes and emphases of the *Health Framework for California Public Schools, Kindergarten through Grade 12*, other state curriculum documents, and nationally approved guidelines for the preparation of entry level health educators and for teaching health science.
- The statement of program philosophy shows a clear awareness of the professional preparation that candidates need in order to teach health science effectively among diverse students in California schools.
- Expected program outcomes for students are defined clearly so that student assessments and program reviews can be aligned appropriately with the program's goals in health science.
- The institution periodically reviews and reconsiders the program philosophy, design, and intended outcomes in light of recent developments in the discipline, nationally approved guidelines, standards, and recommendations, and the needs of public schools.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 2

Scientific and Behavioral Foundations

The program requires preparation in the foundations of health and behavioral sciences, including psychology, sociology, human growth and development, biology, anatomy and physiology, chemistry, and current theories in health behavior as they relate to human health.

Rationale for Standard 2

To understand the breadth and depth of health promotion and disease prevention, health educators must be knowledgeable about the psychological, sociological, physiological, anatomical, biological and biochemical systems and sciences. Health educators must be able to apply these behavioral and scientific principles to the scope and practice of health education.

NOTE: Coursework in this area (e.g., biology, anatomy and physiology, psychology, etc.) is designed to provide a foundation for subsequent health courses and is usually found in general education. Coursework used to meet Standard 2 shall not be counted as part of the unit requirements in Precondition 1 on page 7.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- The study of behavioral aspects of health, including sociology, psychology and health psychology.
- The scientific basis of health science, including preparation in biology, anatomy, physiology, and chemistry.
- Opportunities for candidates to apply behavioral and scientific principles to the study of the health science/health education.
- The study of race, gender, age, ethnicity, culture, and exceptional needs within the population as they relate to health, disease, and health behaviors.
- The study of current theories in health behavior, for example, social learning theory, health belief model, risk and protective factors, and resiliency research.
- Opportunities for candidates to recognize and respect the patterns of individual differences in growth and development.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 3

Personal Health, Physical Activity, and Lifelong Well-Being

Candidates in the program learn how to promote and maintain personal health, physical activity, and lifelong well-being for themselves and others. The program also provides instruction in and study of the ways to adapt positively to the variety of physical, mental, emotional, and social changes that occur throughout life.

Rationale for Standard 3

Basic to health science is a foundation of knowledge about the interrelationship of personal health behaviors, physical activity, and lifelong well-being. Knowledge of strategies to deal positively with changes in life is necessary to enable students to cope with those changes and avoid destructive patterns such as drugs or conflict. Prospective health educators need to understand the interrelationship between mental health and use of effective coping strategies to reduce stress.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- Study of health as a state of physical, mental, emotional, and social well-being.
- Study of personal health behaviors throughout the life cycle.
- Study of program planning to meet the individual physical, mental, emotional, and social needs specific to different stages of life.
- Study of the positive impact of physical activity and exercise on lifelong health and well-being.
- Study of standards of fitness and how physical activity, along with healthy diet, confers numerous physical and mental health benefits.
- Study of the factors that influence a person's attitude, including self-image and the awareness of options or choices for lifelong well-being in the school or community setting.
- Study of the development, recognition, and treatment of addictive behaviors.
- Study of conflict resolution and diffusion, including causal and avoidance factors, and effective communication techniques, including assertiveness and refusal skills.
- Study of life changes, including the skills and resources to find aid and assistance in times of transition or change, including the grief process.
- Study of effective coping and stress management strategies, including relaxation and physical activity.

**Standard 3: Personal Health, Physical Activity, and
Lifelong Well-Being (Continued)**

- Study of strategies for decision-making, goal setting, and problem-solving to maintain a healthy lifestyle.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 4

Nutrition and Dietary Practices

Candidates in the program develop knowledge, attitudes, skills, and behaviors to integrate basic principles of human nutrition and dietary practices for health and well-being throughout the life cycle.

Rationale for Standard 4

Prospective health educators need to understand the role of human nutrition in health promotion, disease prevention, and well-being. Knowledge of human nutrition is necessary to enable individuals to select a nutritionally adequate diet to promote lifelong health and well-being.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- The study of the essential nutrients and basic principles of human nutrition throughout the life cycle.
- The study of the environmental, cultural, socioeconomic, and psychological factors that impact on human nutrition and dietary practices.
- The study of the function of nutrients throughout the life cycle, including their dietary sources and the consequences of their deficiency or excess.
- The study of nutritional requirements during the perinatal period.
- The study of the assessment of nutritional status as it relates to health and well-being.
- The study of dietary practices, eating behaviors, and disorders.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 5

Alcohol, Tobacco, and Other Drugs

Candidates learn how to safeguard personal and family health from the physical, mental, and social effects of alcohol, tobacco, anabolic steroids, and other drugs.

Rationale for Standard 5

Knowledge of the physical, mental, and social effects of the use of alcohol, tobacco, anabolic steroids, and other drugs is necessary to enable youth to abstain from alcohol, tobacco and other drug use and to engage in responsible decision making. Health educators play a major role in discouraging the initial or continued use of harmful substances, by explaining the negative consequences of such use, and promoting safe and responsible behavior. Instruction in this area must be consistent with current Education Code mandates.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- Study of the short- and long-term physiological effects of alcohol, tobacco, and other drugs, including anabolic steroids in youth as well as adults.
- Study of positive, healthy alternatives to alcohol, tobacco and other drug use.
- Study of the development of behaviors to increase interpersonal and social skills, self-esteem, and self-confidence in order to make responsible decisions.
- Study of a range of social and mental health issues, including problems which arise from alcohol, tobacco, and other drug use that affects relationships with friends, families, school, and work.
- Study of effective prevention, cessation, education and treatment programs for alcohol, tobacco, and other drug use.
- Study of historical patterns of alcohol, tobacco and other drug use as influenced and impacted by culture.
- Study of the responsible use of over-the-counter and prescription drugs.
- Study of information and development of skills for resisting pro-drug use social influences.
- Study of alcohol, tobacco, and other drug use prevalence rates among California and national populations.
- Study of the risk, protective, and resiliency factors that influence, occur with, or impact alcohol, tobacco, and other drug use.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 6

Family Life and Relationships

Candidates in the program learn about family life education which promotes responsible behavior, respect for others, and skills for communicating effectively with family, peers and others. The program provides comprehensive instruction in human sexuality, emphasizing abstinence and including conception and contraception, childbirth, and the moral, legal, and economic responsibilities of parenthood.

Rationale for Standard 6

Candidates must develop the skills to teach sensitive topics such as family life and relationships. Health educators play an important role in promoting healthful attitudes, developing communication skills that address relationships, dispelling sexual myths, and preventing teenage pregnancy, sexual harassment, assault, and other forms of abuse. Instruction in this area must be consistent with current Education Code mandates.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- Study of the male and female reproductive systems and developmental changes that occur throughout the life cycle.
- Study of the influence of alcohol, tobacco, and other drugs on sexual behavior, pregnancy, and fetal development.
- Study of risk, protective and resiliency factors, including personal and social skills, that prevent unintended pregnancy and sexually transmitted diseases, including HIV infection.
- Study of interpersonal and social dynamics that influence family living.
- Study of parenting responsibilities and the rights of children.
- Study of the most current legal and regulatory requirements for family life education, including mandated reporting requirements and procedures for staying current with legal and regulatory changes.
- Study of the value of tolerance and understanding of people with alternative living modes and sexual orientations.
- Study of communication and conflict resolution in family living.
- Study of facts, myths, and misinformation relating to human sexuality.
- Study of intergenerational relationships and their impact on family life.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 7

Injury and Violence Prevention and Safety Promotion

Candidates learn ways to promote and maintain positive and safe health practices, and prevent injury and violence, within the home, school, workplace, and community environments.

Rationale for Standard 7

Quality of life is dependent on practices that protect and promote the health of individuals, families, schools, workplaces, and communities. Health educators play an important role by communicating accurate health information about the prevention of violence and intentional and unintentional injury behaviors.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- Study of how to be an active participant in community efforts that address local safety, health, and environmental issues.
- Study of how to recognize and respond to health and safety situations within a school environment.
- Study of how to promote positive and safe health practices, programs, and policies within the home, school, workplace, and community environments.
- Study of the health policies and programs that influence and support the comprehensive school health system in the school and community environments.
- Study of how to develop safe school and crisis response plans that include prevention, intervention and postvention components.
- Study of suicide intervention strategies and skills.
- Study of behaviors that contribute to and prevent intentional and unintentional injuries related to weapons, violence, and gang affiliation.
- Study of equipment, (e.g., safety belts and helmets) and/or behaviors and practices which promote, protect, and/or compromise the health and safety of the individual and family.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 8

Consumer Health, Culture, Media, and Technology

Candidates in the program study the impact of culture, media, technology, and other factors on consumer health attitudes, knowledge, practices, and skills.

Rationale for Standard 8

Consumers of information, products, and services must understand that health is influenced by a variety of factors including the cultural context, the media, and technology. Prospective health educators need to be critical thinkers and problem solvers who are able to analyze, interpret, and evaluate the influence of these factors on health. Students need to understand the contributions of culture, media, technology, and other factors that affect individual, family, and community health. With increasing racial, ethnic, cultural, and linguistic diversity, there is a need to focus on appropriate, relevant, specific, and sensitive approaches to disease prevention and health promotion education.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program prepares candidates to:

- Identify qualified people, places, and products relative to health care, and recognize warning signs indicative of questionable practices and products.
- Read, interpret, and explain information found on the labels of health and food products.
- Analyze how cultural, media, and technological influences affect consumer decision-making behavior.
- Differentiate between reliable and unreliable sources of health information, and recognize laws and agencies that protect consumers from false and misleading claims.
- Access a variety of database resources, including those on electronic media, related to health issues.
- Access and evaluate information to discern the value and utility of health products and services.
- Use technology as it relates to the practice and promotion of health education.
- Use emerging technologies to continue to access the most current health information and communicate with peers.
- Understand physical and legal requirements regarding the appropriate use of technology.
- Understand the influences of culture and religion on the selection of traditional and nontraditional approaches to health care in the United States.

**Standard 8: Consumer Health, Culture, Media,
and Technology (Continued)**

- Advocate for access to affordable, culturally appropriate and language-specific health education and care for all groups in the community.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 9

Professionalism and Ethics

Candidates in the program learn about the practice and teaching of professional ethics, and the application of current ethical issues to the curriculum. The program addresses past and present philosophies of health science and their impact on the components of health science programs. The historical development of school health, current issues that affect the discipline, and the responsibilities of educators as members of the profession are integral parts of the curriculum.

Rationale for Standard 9

Understanding the role of health science in contemporary society requires knowledge of ethical and professional issues which enable students to develop a personal and professional philosophy of health science which includes a personal code of ethics. Prospective health educators and their students need to understand that active involvement in local community settings, community and professional organizations and in the legislative process is vital to continued professional growth and to the promotion of health science.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- Study of policies and practices mandated by the Legislature that pertain to health science, including confidentiality and reporting requirements.
- The application of current ethical issues and philosophies to the health science curriculum.
- Study of current health science programs and practices within a historical perspective.
- Study of the professional health educator code of ethics.
- Emphasis on benefits and responsibilities of being an active member of professional organizations.
- Emphasis on the importance of keeping informed about the current knowledge base in health science.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 10

Comprehensive School Health System (CSHS)

Candidates in the program learn to plan, implement, coordinate, and evaluate a health education curriculum within the context of a comprehensive school health system.

Rationale for Standard 10

Prospective health educators need to understand the components of a comprehensive school health system, the interrelationship of those components, and the role of the components within this system. A CSHS includes health education, physical education, health services, nutrition services, psychological and counseling services, a safe and healthy school environment, health promotion for staff, and family/community involvement. A CSHS is an integrated set of planned, sequential, school affiliated strategies, activities, and services designed to promote the optimal physical, emotional, social, and educational development of students. Integral to the concept of a CSHS is collaboration among home, school, and community in the development and implementation of health education programs. This collaboration will enhance the health status of adolescents, youth, and adults.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program prepares candidates to:

- Assess individual, family, and community needs for health education.
- Plan, implement, and evaluate a health education program within the context of a comprehensive school health system, as defined in California's Health Framework.
- Coordinate the delivery of the health education program within a comprehensive school health system.
- Serve as a leader and a resource in health education and within the comprehensive school health system.
- Communicate about and advocate for health and health education needs, concerns, and resources.
- The institution may also bring other program qualities related to this standard to the reviewers' attention.

Standard 11

Disease Prevention, Risk Reduction, Health Promotion

The program provides candidates with instruction in epidemiology, disease prevention, risk reduction, and health promotion.

Rationale for Standard 11

Chronic diseases, which account for the majority of all premature deaths, are largely preventable, manageable, or treatable if diagnosed at an early stage. Established and emerging communicable diseases continue to be a threat. Central to health instruction is a knowledge of epidemiology, disease processes and prevention, and diagnostic and treatment procedures. Understanding the relationship between healthful behaviors and disease prevention is a major key to a reduction in morbidity and mortality.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which the program includes:

- Study of risk and health promoting behaviors and their relationship to chronic disease.
- Study of risk and health promoting behaviors that prevent the spread of communicable diseases.
- Study of communicable diseases including, but not limited, to the chain of infection, microorganisms, sexually transmitted diseases including HIV/AIDS, food-borne illnesses, and hepatitis.
- Study of chronic diseases including, but not limited to, cardiovascular and cerebrovascular diseases, cancer, diabetes, and chronic obstructive pulmonary disease.
- Study of epidemiology emphasizing leading causes of morbidity and mortality throughout the life cycle.
- Study of the primary, secondary, and tertiary levels of disease prevention.
- Study of hereditary, environmental, and lifestyle factors that impact on personal health.
- Study of surveillance systems to monitor priority health risk behaviors among students at the national, state, and local levels.
- Other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 12

Diversity and Equity in the Program

The program provides multiple opportunities for candidates to understand and appreciate the role of human diversity in health science education. The program includes instruction in cultural, ethnic, gender, age, socio-economic, and language diversity, as well as instruction about individuals with disabilities. The program promotes educational equity by utilizing instructional, advisory, and curricular practices that offer equal access to program content and career options for all students.

Rationale for Standard 12

Students who attend California schools are representative of the rich cultural, linguistic, and ethnic backgrounds of California's population. From an ethical and intellectual standpoint, it is crucial to systematically include all groups of people in the continuing study of health science. It is imperative that health instructors understand the contributions of various groups to the development of this discipline. Candidates need to understand and develop sensitivity to the ways in which diverse groups affect and are affected by health science. They must also be aware of barriers to academic participation and success and must experience equitable practices of education during their preparation. Understanding the role of human diversity as it exists in California's public schools and the community at large is essential for teachers to competently function as health educators.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which:

- The program provides knowledge and enhances understanding and appreciation of the cultural dimensions and context of health promotion and disease prevention and the study of health science.
- Each student learns about the contributions and health practices of diverse cultural and ethnic groups within the United States and in other regions/nations.
- Students examine ways in which the historic development of health science and health science education have affected groups with diverse backgrounds and individuals with varying abilities.
- Coursework in the program fosters understanding, respect, and appreciation of human differences, including linguistic, cultural, ethnic, gender, and individual variations.
- In the course of the program, students experience classroom practices and use instructional materials that promote educational equity among diverse learners.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Category II: Essential Features of Program Quality

Standard 13

Coordination of the Program

The health science program is coordinated effectively by one or more persons who are responsible for program planning, implementation, and review.

Rationale for Standard 13

The accomplishments of candidates in a subject matter preparation program depend in part on the effective coordination of the program by responsible members of the institution's administrative staff and/or academic faculty. For candidates to become competent in the subjects they will teach, all aspects of their subject matter preparation must be planned thoughtfully, implemented conscientiously, and reviewed periodically by designated individuals.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which:

- There is effective communication and coordination among the academic program faculty, and between the faculty and local school personnel, local community colleges, and the professional education faculty.
- One or more persons are responsible for overseeing and assuring the effectiveness of student advisement and assessment in the program (refer to Standards 14 and 15), and of program review and development by the institution (refer to Standard 16).
- The institution ensures that faculty who teach courses in the health science teacher preparation program have backgrounds of advanced study or professional experience and currency in the areas they teach.
- Sufficient time and resources are allocated for responsible faculty and/or staff members to coordinate all aspects of the program.
- The program includes faculty role models from diverse cultural and ethnic groups, men and women, and individuals with exceptional needs.
- The program includes faculty who are concerned about and sensitive to diverse cultural and ethnic groups, men, women, and individuals with exceptional needs.
- The institution encourages linguistically, culturally, and ethnically diverse students to enter and complete the subject matter program and to pursue careers in health education.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 14

Student Advisement and Support

A comprehensive and effective system of candidate advisement and support provides appropriate and timely program information and academic assistance to candidates and potential students, and gives attention to transfer students and members of groups that traditionally have been underrepresented among teachers of health science.

Rationale for Standard 14

To become competent in a discipline of study, candidates must be informed of the institution's expectations, options and requirements; must be advised of their own progress toward academic competence; and must receive information about sources of academic and personal assistance and counseling. Advisement and support of prospective teachers are critical to the effectiveness of subject matter preparation programs, particularly for transfer students and members of groups that traditionally have been underrepresented in the discipline. In an academic environment that encourages learning and personal development, prospective teachers acquire a student-centered outlook toward education that is essential for their subsequent success in public schools.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which:

- Advisement and support in the program are provided by qualified individuals who are assigned those responsibilities and who are available and attentive when the services are needed.
- Advisement services include information about course equivalencies, financial aid options, admission requirements in professional preparation programs, state certification requirements, field-experience placements, and career opportunities.
- Information about subject matter program purposes, options and requirements is available to prospective students and distributed to enrolled students.
- The institution encourages students to consider careers in teaching, and attempts to identify and advise interested individuals in appropriate ways.
- The institution actively seeks to recruit and retain students who are members of groups that traditionally have been underrepresented in health science.
- The institution collaborates with community colleges to articulate academic coursework and to facilitate the transfer of students into the subject matter program.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 15

Assessment of Subject Matter Competence

The program uses multiple measures to assess the subject matter competence of each candidate formatively and summatively in relation to the content of Standards 1 through 12. Formative assessments serve as the basis for granting equivalence for coursework completed at other institutions. Each candidate's summative assessment is congruent in scope and content with the specific studies the candidate has completed in the program.

Rationale for Common Standard 15

An institution that offers content preparation for prospective teachers has a responsibility to verify their competence in the subject(s) to be taught. It is essential that the assessment in health science use multiple measures, have formative and summative components, and be as comprehensive as Standards 1 through 12. The content must be congruent with each candidate's core, breadth, and perspective studies in the program (see Preconditions 2 and 3 on page 13). Course grades and other course evaluations may be part of the summative assessment, but may not comprise it entirely.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which:

- The assessment process includes a portfolio of the candidate's work as well as candidate presentations, projects, observations, interviews, and oral and written examinations based on criteria established by the institution.
- The assessment encompasses the content of Standards 1 through 12 and is congruent with each candidate's core, breadth, and perspective studies in the program.
- The assessment encompasses knowledge and competence in comprehensive school health systems; nutrition and dietary behaviors; health promotion, disease prevention, and risk reduction; personal health, physical activity, and lifelong well-being; injury prevention and safety promotion; alcohol, tobacco, and other drugs; family health and relationships; and professionalism and ethics, consistent with Standards 2 through 11.
- The assessment process is valid, reliable, equitable, and fair, and includes provisions for candidate appeals.
- The assessment scope, process, and criteria are clearly delineated and made available to candidates .
- The institution makes and retains thorough records regarding each candidate's performance in the assessment.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 16

Program Review and Development

The health science program has a comprehensive, ongoing system of review and development that involves faculty, candidates, and appropriate public school personnel, including health educators, and that leads to continuing improvements in the program.

Rationale for Standard 16

The continued quality and effectiveness of subject matter preparation depends on periodic reviews of and improvements to the programs. Program development and improvement should be based in part on the results of systematic, ongoing reviews that are designed for this purpose. Reviews should be thorough and should include multiple kinds of information from diverse sources.

Factors to Consider

When reviewers judge whether a program meets this standard, the Commission expects them to consider the extent to which:

- Systematic and periodic reviews of the health science program reexamine its philosophy, purpose, design, curriculum, and intended outcomes for students (consistent with Standard 1).
- Information is collected about the program's strengths, weaknesses, and needed improvements from participants in the program, including faculty, candidates, recent graduates, and employers of recent graduates, and from other appropriate public school personnel, including teachers of health science.
- Program development and review involves consultation among departments that participate in the program (including the health education and health science departments) and includes a review of recommendations by elementary, secondary, and community college educators.
- Program improvements are based on the results of periodic reviews, the implications of new developments in health science, the identified needs of program candidates and school districts in the region, and recent health science curriculum policies of the state.
- Assessments of candidates in the program (pursuant to Standard 15) are also reviewed and used for improving the philosophy, design, curriculum, and/or outcome expectations of the program.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Specifications for the Assessment of Subject Matter Knowledge and Competence for Prospective Teachers of Health Science

Health Science Teacher Preparation and Assessment Advisory Panel California Commission on Teacher Credentialing 1996

A student who seeks to earn the Single Subject Teaching Credential in Health Science should have a basic knowledge of the foundations of health science education; the influences on personal health; family life and relationships; community and societal health; and health promotion, disease prevention, and risk reduction. The student should also be skillful at higher-order thinking skills such as analyzing and interpreting information; comparing, contrasting and synthesizing ideas; thinking critically; and drawing sound inferences and conclusions from information that is provided or widely known.

To verify that these expectations have been attained, the Commission's standardized assessment of health science competence consists of two components: (1) a multiple-choice knowledge assessment and (2) a constructed-response performance assessment. For the two sections of the assessment, the Health Science Teacher Preparation and Assessment Advisory Panel drafted the following specifications of knowledge, skills, and abilities needed by teachers of health science. Adopted by the Commission, these specifications illustrate the knowledge, skills, and abilities that students should acquire and develop in a subject matter program for future teachers of health science.

Both the multiple-choice and constructed-response components of the assessment are based on the same content categories (see Section 1 below). Examinees are expected to have a command of the subject matter content that is typically studied in a discipline-based setting. In addition, they are expected to demonstrate an understanding of that content from an integrated and inter-disciplinary perspective.

Section 1: Knowledge of Health Science

Prospective teachers of health science should have a command of knowledge in five areas, as follows, in order to pass the assessment of knowledge of health science:

- I. Foundations of Health Science Education (24%)
- II. Influences on Personal Health (22%)
- III. Family Life and Relationships (22%)
- IV. Community and Societal Health (14%)
- V. Health Promotion, Disease Prevention, and Risk Reduction (18%)

I. Foundations of Health Science Education (24%)

- **Understand fundamental issues related to health science programs.**

Includes the historical and philosophical foundations of health science education, contributions to health science by individuals and groups, and factors and issues that affect the health science education curriculum (e.g., local community standards, culturally diverse health practices, health needs of the target population, legislatively mandated policies and practices that pertain to health science education).

- **Understand the components of a comprehensive school health system (CSHS).**

Includes the roles and interrelationships of the components of a CSHS, such as health education, physical education, health services, nutrition services, psychological and counseling services, a safe and healthy school environment, health promotion for staff, and family and community involvement.

- **Understand ethical issues related to health science and health science education.**

Includes the professional code of ethics as it applies to health education, including issues of confidentiality, and ethical issues related to the use of advanced medical and other health-related procedures and technologies.

- **Understand current theories of health behavior.**

Includes characteristics of various models and theories relating to health behavior, such as social learning theory, health belief models, and resiliency research.

- **Apply problem-solving, decision-making, and critical-thinking skills to health-related issues.**

Includes activities that develop and promote problem-solving, decision-making, and critical-thinking skills; the relationships between decision making and personal and community health; and the effects of a sense of self-efficacy on the decision-making process.

- **Apply effective communication skills as they relate to health.**

Includes the use of oral, written, graphic, and technological media to convey ideas about health-related issues; the role of communication in interpersonal relationships; strategies that encourage appropriate expression; the importance of listening skills in the communication process; the use of effective communication skills to advocate for personal and community health; and methods that develop and promote communication skills, such as negotiation and refusal skills.

II. Influences on Personal Health (22%)

- **Understand the nature of personal health and the benefits related to the achievement of lifelong well-being.**

Includes the concept of health and factors that contribute to it, the relationship between particular behaviors and health, the short-term and long-term benefits of a healthy lifestyle, risk factors that can compromise health, and methods for adapting positively to changes throughout life.

- **Understand the relationships among personal health, human growth and development, and body systems.**

Includes stages of human growth and development, characteristics of the aging process, and the effects of various factors (e.g., disease, exercise) on body systems and development.

- **Understand the influence of nutrition on personal health.**

Includes the nature, importance, and sources of various nutrients; dietary choice and planning; developmental, environmental, cultural, socioeconomic, and psychological factors that affect dietary habits and nutritional status; the relationship between diet and disease; issues related to ideal weight and body composition, such as weight management and eating disorders; and differing nutritional needs throughout the life cycle.

- **Understand the role of physical activity in the promotion of personal health.**

Includes ways of achieving physical fitness; benefits of regular and lifelong exercise; criteria used to assess physical fitness; and the relationship of sleep, rest, and relaxation to health.

- **Understand the characteristics and effects of alcohol, tobacco, and other drugs on personal health.**

Includes the classification of drugs, including alcohol and tobacco; uses and benefits of drugs for medicinal purposes; historical patterns of drug use in various cultures; the body's reactions to various classes of drugs; factors that contribute to the misuse and abuse of alcohol, tobacco, and other drugs, including stimulants, depressants, hallucinogens, inhalants, and anabolic steroids; health risks and social costs of substance abuse; and the nature of chemical dependency and processes related to its prevention, intervention, and treatment.

- **Understand the nature of mental and emotional health and their relationships to personal health.**

Includes factors that affect mental and emotional health; the relationship between self-image and attitudes and behaviors; sources, signs, and symptoms of stress and positive techniques for managing stress; the nature of depression; risk factors related to suicide and other health problems; and appropriate intervention strategies.

III. Family Life and Relationships (22%)

- **Understand factors that affect relationships within families.**

Includes the nature of healthy relationships within diverse family structures, intergenerational relationships, and strategies and behaviors that promote healthy relationships.

- **Understand strategies for promoting healthy peer relationships.**

Includes stages of social development, benefits of peer relationships, techniques for developing and maintaining friendships, dynamics of group affiliations (e.g., teams, gangs), the effects of peer pressure and strategies for responding to pressure in a positive manner, the nature and importance of social support systems, and strategies for building cooperative relationships.

- **Understand human sexuality.**

Includes characteristics of sexual development and human reproduction; methods of delaying or avoiding pregnancy; myths and misinformation relating to human sexuality; family planning; the responsibilities of parenthood; and factors that affect decisions about sexual behavior, such as cultural norms, peer pressure, and the influence of alcohol and other drugs.

- **Understand the nature of conflict and strategies for promoting healthy interactions between individuals experiencing conflict.**

Includes common sources of conflict and methods of conflict resolution, strategies for developing self-control, the nature and effects of violence and methods of avoiding violence, types of hurtful interpersonal behaviors (e.g., ridicule, sexual abuse, exploitation, discrimination, harassment) and ways of avoiding or confronting these behaviors in a proactive manner, strategies for dealing with individuals exhibiting dangerous behaviors, and skills for self-protection from crime and assault.

- **Understand the value of individual differences and the promotion of healthy interpersonal relationships.**

Includes the recognition of individual differences (e.g., race, ethnicity, gender, age, disability, religion, sexual orientation, culture, economic status), the nature of stereotypes and their effects on individuals and groups, the effects of discrimination and strategies for avoiding discriminatory behavior, and appropriate methods to promote individuals' tolerance of different lifestyles and valuing of diversity.

IV. Community and Societal Health (14%)

- **Understand social and physical environmental factors that affect health.**

Includes sources and potential health effects of various social and physical environmental factors, such as population density, poverty, biological agents, hazardous wastes, radiation, and air, water, and noise pollution; and methods for minimizing or coping with health risks in the environment.

- **Understand important current health issues and their effects on community health.**

Includes issues of access to and availability of health care (e.g., HIV testing, immunizations, family planning), health-related policies and laws (e.g., tobacco use, DUI, drug testing), factors that inhibit the promotion of community health (e.g., alcohol, tobacco, and other drug use; economic issues; opposition by special interest groups), and methods used to analyze health issues and make decisions that promote community health.

- **Evaluate sources of health-related information.**

Includes the identification and evaluation of appropriate scientific sources of health-related information (e.g., local health agencies, libraries, health practitioners, computerized databases), strategies for determining the reliability of different sources of health information, roles of various types of health agencies (e.g., American Cancer Society, AMA, CDC, local clinics), and strategies for maintaining health literacy as advances occur.

- **Analyze media messages and their impact on culture and personal and family health.**

Includes skills in critically analyzing media messages of all types; common advertising techniques (e.g., targeting vulnerable audiences); the effects of advertising, movies, videos, and popular music on attitudes toward health-related issues and on behavior (e.g., body image, violence); differences in the goals of advertisers and health advocates; and methods of effectively using media for health promotion.

- **Apply knowledge of wise consumer practices to health promotion.**

Includes the interpretation and evaluation of food labels and how to make food choices based on particular needs (e.g., low fat, low sodium, adequate nutrition on a limited budget), the analysis of claims related to food (e.g., "organically grown," "lower in fat"), ways to distinguish health practices that are founded on sound scientific research from those that are not, and factors that influence health-related purchases and the selection of health-care providers.

V. Health Promotion, Disease Prevention, and Risk Reduction (18%)

- **Understand the epidemiology and prevention of noncommunicable and chronic diseases.**

Includes characteristics of noncommunicable and chronic diseases (e.g., cardiovascular and cerebrovascular diseases, cancer, diabetes, pulmonary diseases); hereditary and environmental factors that influence personal health; behaviors that contribute to or prevent chronic diseases; common health-screening techniques (e.g., self-examinations, dental exams); and the prevention, management, and treatment of these diseases.

- **Understand the epidemiology and prevention of communicable diseases.**

Includes characteristics of communicable diseases (e.g., sexually transmitted diseases, HIV/AIDS, food-borne illnesses, hepatitis) and disease-causing microorganisms; the role of the body's natural defense mechanisms in fighting infections; the chain of transmission; environmental factors that affect the spread of communicable diseases; behaviors that contribute to or prevent the spread of communicable diseases (e.g., universal precautions); the role of primary and secondary prevention activities in promoting health; and the prevention, management, and treatment of communicable diseases.

- **Understand issues and procedures involved in the promotion of safety and injury prevention.**

Includes common causes and effects of unintentional injuries (e.g., use of alcohol and other drugs, fatigue), strategies for identifying and avoiding dangerous settings and situations, methods of preventing various types of injuries, equipment and behaviors for avoiding injury in various settings and situations, and methods of promoting safety.

- **Understand procedures used to provide care in medical emergency situations.**

Includes knowledge and skills used in identifying a medical emergency, steps to take in an emergency, basic first-aid procedures, principles of cardiopulmonary resuscitation (CPR), and procedures that protect the safety of the caregiver (e.g., wearing gloves, avoiding contact with bodily fluids).

- **Apply risk assessment skills with respect to health-related issues.**

Includes methods that develop and promote health-risk appraisals and self-assessment of behavioral risk factors, an understanding of how personal risk factors can be ameliorated (e.g., cessation of smoking, weight management), and strategies for making a decision based on an assessment of the risks and benefits associated with various options.

Section 2: Subject Matter Constructed-Response Assessment in Health Science

The second section of the standardized assessment of prospective teachers of Health Science consists of constructed-response assessments. Each assessment requires demonstration of one or more of the following abilities.

- The ability to evaluate and/or interpret a given situation or case study related to health science. Information will be provided in printed form (e.g., written descriptions, dialogues, tables, graphs, diagrams).
- The ability to select and/or design appropriate practices that will meet specified goals in health science contexts.
- The ability to propose and defend appropriate solutions to specified health-related problems.
- The ability to explain and justify evaluations, interpretations, selections, designs, and proposals using appropriate information from the field of health science and related fields (e.g., psychology, biological sciences).

Examples of the types of problems that might be included on the test are as follows:

- Comparing the costs and benefits of a variety of health-related products and services (e.g., food choices, pharmaceutical products, provider services) for a given individual or family.
- Analyzing the short-term and long-term effects of the lifestyle choices and habits of a given person (e.g., one who exercises regularly, one who uses tobacco products).

Part 3

Implementation of

Health Science Teaching Standards



Implementation of Program Quality Standards for Subject Matter Preparation in Health Science

The Program Quality Standards for Subject Matter Preparation in Health Science are part of a broad shift in the policies of the California Commission on Teacher Credentialing related to the preparation of professional teachers and other educators in California colleges and universities. The Commission initiated this broad policy change to foster greater excellence in educator preparation and to combine flexibility with accountability for institutions that educate prospective teachers. The success of this reform depends on the effective *implementation* of program quality standards for each credential.

Pages 41 through 44 of the handbook provide general information about the transition to program quality standards for all teaching credentials. Then the handbook offers detailed information about implementing the health science standards (pages 45 through 53).

Transition to Quality Standards for All Teaching Credentials

The Commission is gradually developing and implementing Standards of Program Quality and Effectiveness for all teaching credentials. The overall purpose of the standards is to provide the strongest possible assurance that future teachers will have the expertise and abilities they will need for their critically important roles and responsibilities. Among the most significant areas of knowledge and abilities for teaching are those associated with the subjects of the school curriculum.

The Commission began to develop new standards for the subject matter preparation of teachers in 1986. In that year, the Commission appointed an expert advisory panel in elementary education, which developed *Standards of Program Quality for the Subject Matter Preparation of Elementary Teachers*. Following an extensive process of consultation with elementary educators, the Commission adopted the subject matter program standards for the Multiple Subject Teaching Credential. The standards have now been implemented in 58 colleges and universities, which offer a total of 66 programs.

In 1989, the Commission established expert subject matter advisory panels to develop standards for the subject matter preparation of prospective secondary teachers in English, mathematics, science, and social science. The panels consisted of K-12 teachers of the subjects, public school curriculum specialists, university professors of the subjects, and other subject matter experts in California. Following extensive consultation with colleges, universities, professional organizations, and local and state education agencies, the Commission adopted the standards in 1992. In a similar manner, in 1991 the Commission established expert panels to develop subject matter standards in art, music, physical education, and languages other than English. These standards were adopted by the Commission in 1994.

In January of 1995, the Commission appointed advisory panels to develop program standards in agriculture, business education, health education, home economics, and industrial and technology education. Initial drafts of standards in these subjects were distributed widely for discussion and comment before they were completed by the panels and adopted by the Commission on February 2, 1996.

Improvements in the Review of Subject Matter Programs

The last occasion on which the Commission reviewed subject matter programs in health science was 1983. There are relatively few similarities between (a) the program guidelines and review procedures that were used in 1983 and (b) the Commission's plan for implementing the new standards in this handbook. In reviewing programs according to the new standards, several major improvements are anticipated.

- (1) The standards are *much broader* than the prior guidelines for subject matter programs. The standards provide considerably *more flexibility to institutions*.
- (2) As a set, the standards are *more comprehensive* in addressing the *quality* of subject matter preparation. They provide a stronger assurance of excellent preparation.
- (3) The new Program Review Panels will conduct *more intensive reviews* that will focus on *program quality issues* rather than course titles and unit counts.
- (4) The new panels will have *more extensive training* because the standards require that they exercise more professional discretion about the *quality* of programs.
- (5) Institutional representatives will have opportunities to meet with the Review Panels to discuss questions about programs and standards. Improved communications should lead to better decisions about program quality.

Alignment of Program Standards and Performance Assessments

The Teacher Preparation and Licensing Act of 1970 established the requirement that candidates for teaching credentials verify their competence in the subjects they intend to teach. Candidates for teaching credentials may satisfy the subject matter requirement by completing approved subject matter programs or by passing subject matter assessments that have been adopted by the Commission. The Commission is concerned that the scope and content of the subject matter assessments be aligned and congruent with the program quality standards in each subject.

To achieve this alignment and congruence in health science, the Commission asked the Health Science Advisory Panel to develop subject matter assessment specifications that would be consistent in scope and content with the program quality standards in this handbook. Following extensive discussion and review by subject matter experts throughout the state, the Commission adopted a detailed set of *Specifications for the Assessment of Subject Matter Knowledge and Competence of Prospective Teachers of Health Science*. These specifications, which are included in this handbook (pages 32 through 38), are the basis for the subject matter assessment in health science being developed by National Evaluation Systems, Inc.

The Commission is pleased that the *Specifications* for subject matter assessments are as parallel as possible with the scope, content and rigor of the standards for subject matter programs. To strengthen the alignment between subject matter assessments and programs, college and university faculty and administrators are urged to examine the *Specifications* as a source of information about knowledge, abilities and perspectives that are important to include in subject matter programs for teachers of health science.

Validity and Authenticity of Subject Matter Assessments

The Commission is also concerned that the subject matter assessments of prospective teachers address the full range of knowledge, skills, and abilities needed by teachers of each subject. For fifteen years the Commission relied on subject matter examinations that consisted entirely of multiple-choice questions. In 1987-88, the Commission evaluated fifteen of these subject matter exams comprehensively. More than 400 teachers, curriculum specialists, and university faculty examined the specifications of these tests, as well as the actual test questions. An analysis of the reviewers' aggregated judgments showed that (1) particular changes were needed in each multiple-choice test and (2) each multiple-choice test should be supplemented by a *performance assessment* in the subject.

Since 1988, the Commission's subject matter advisory panels have created performance assessments for each of ten Single Subject Credentials. In most cases, these performance assessments consist of constructed-response problems or tasks, to which examinees construct complex responses instead of selecting an answer among four given choices. Examinees' responses are scored on the basis of specific criteria that were created by the advisory panels and are administered by subject specialists who are trained in the scoring process. Candidates for the ten Single Subject Credentials must pass the performance assessment as well as a multiple-choice test of their subject matter knowledge, unless they complete an approved subject matter program. Meanwhile, for the Multiple Subject Credential, the Commission developed and adopted the *Multiple Subjects Assessment for Teachers (MSAT)* that consists of a multiple-choice (*Content Knowledge*) section, and a constructed-response (*Content Area Exercises*) section. By developing and adopting these assessments, the Commission has committed itself to assessing the subject matter knowledge and competence of prospective teachers as validly and comprehensively as possible. Likewise, the new examinations in agriculture, business, health science, home economics, and industrial and technology education developed by National Evaluation Systems, Inc. (NES) will include constructed-response components.

New Terminology for "Waiver Programs"

In 1970, the legislature clearly regarded the successful passage of an adopted examination as the principal way to meet the subject matter requirement. However, the 1970 law also allowed candidates to complete Commission-approved subject matter programs to "waive" the examinations. Because of this terminology in the 1970 statute, subject matter programs have commonly been called *waiver programs* throughout the state.

In reality, the law established two alternative ways for prospective teachers to meet the subject matter requirement. An individual who completes an approved subject matter program is not required to pass the subject matter examination, and an individual who achieves a passing score on an adopted exam is not required to complete a subject matter program. Overall, the two options are used by approximately equal numbers of candidates for initial teaching credentials. Subject matter programs are completed by more than half of the candidates for Single Subject Credentials, but the adopted examination is the preferred route for more than half of all Multiple Subject Credential candidates.

Because of the significant efforts of the Commission and its expert advisory panels, subject matter programs and examinations are being made as parallel and equivalent to each other as possible. The term *waiver programs* does not accurately describe a group of programs that are alternatives to subject matter examinations. For this reason, the Commission uses the term *subject matter programs* instead of *waiver programs*, which is now out of date.

Ongoing Review and Approval of Subject Matter Programs

After the Commission approves subject matter programs on the basis of quality standards, the programs will be reviewed at six-year intervals, in approximately the same way as the Commission reviews professional preparation programs in California colleges and universities. Periodic reviews will be based on the Standards of Program Quality and Effectiveness. Like professional preparation programs, subject matter programs will be reviewed on-site by small teams of trained reviewers. Reviewers will obtain information about program quality from institutional documents and interviews with program faculty, administrators, students, and recent graduates. Prior to a review, the Commission will provide detailed information about the scope, methodology and potential benefits of the review, as well as other implications for the institution.

Review and Improvement of Subject Matter Standards

Beginning in 2002-2003, the Commission will begin a cycle of review and reconsideration of the *Standards of Quality and Effectiveness for Subject Matter Programs in Health Science* and other subjects. The standards will be reviewed and reconsidered in relation to changes in academic disciplines, school curricula, and the backgrounds and needs of California students (K-12). Reviews of program standards will be based on the advice of subject matter teachers, professors and curriculum specialists. Prior to each review, the Commission will invite interested individuals and organizations to participate in it. If the Commission modifies the health science standards, an amended handbook will be forwarded to each institution with an approved program.

Health Science Teacher Preparation: Commission Timeline for Implementation of Standards

Dates	Steps in the Implementation of Standards
1996	The Commission adopts the Standards of Program Quality and Effectiveness that are on pages 14 through 31 of this handbook. The Preconditions on page 13 are also adopted.
July-October 1999	The Executive Director disseminates the handbook. The Commission's staff conducts regional workshops to answer questions, provide information, and assist colleges and universities.
November 1999 - February 2000	The Commission selects, orients and trains a Program Review Panel in Health Science. After March 1, 2000, these qualified content experts begin to review programs in relation to the standards.
March 1, 2000	Review and approval of programs under the new standards begins. No new subject matter programs in health science will be reviewed in relation to the Commission's "old" guidelines of 1982.
2000-2001	Institutions may submit programs for preliminary or formal review on or after March 1, 2000. Once a "new" program is approved, all students who were not previously enrolled in the "old" program (i.e., all new students) should enroll in the new program. Students may complete an old program if they enrolled in it either (1) prior to the commencement of the new program at their campus, or (2) prior to September 1, 2001, whichever occurs first.
September 1, 2001	"Old" programs that are based on the 1983 guidelines must be superseded by new approved programs. After September 1, 2001, no new students should enroll in an old program, even if a new program in health science is not yet available at the institution.
2001-2002 2002-2003	The Commission continues to review program proposals based on the standards and preconditions in this handbook.
September 1, 2004	The final date for candidates to complete subject matter preparation programs that were approved under the 1983 guidelines. To qualify for credentials based on an "old" program, students must (1) have entered that program prior to either (a) the implementation of a new program at their institution, or (b) September 1, 2001, whichever occurred first, and they must (2) complete the old program by September 1, 2004. Students who do not do so may qualify for credentials by passing the Commission's adopted examinations.

Implementation Timeline: Implications for Prospective Teachers

Based on the implementation plan that has been adopted by the Commission (prior page), candidates for Single Subject Credentials in Health Science who do not plan to pass the Commission-adopted subject matter examinations should enroll as early as feasible in subject matter programs that fulfill the standards in this handbook. After a “new” program begins at an institution, no students should enroll for the first time in an “old” program (i.e. one approved under the Commission's “old” guidelines of 1983).

Candidates who enrolled in programs that were approved on the basis of the “old” guidelines (“old” programs) may complete those programs provided that (1) they entered the old programs either before new programs were available at their institutions, or before September 1, 2001, whichever comes first, *and* (2) they complete the old programs before September 1, 2004.

Regardless of the date when new programs are implemented at an institution, no new students should enroll in an old program after June 1, 2001, even if a new program is not yet available at the institution. These students may meet the subject matter requirement for the Single Subject Teaching Credential by passing the subject matter examinations that have been adopted for that purpose by the Commission.

Ordinarily, students are not formally “admitted” to a subject matter program on a specified date. Rather, students begin a subject matter program when they initially enroll in courses that are part of the program. The Commission offers the following clarification of the timeline on the prior page.

- (1) Students who have completed one or more courses in an old subject matter program by September 1, 2001, may complete that program and be recommended for a credential provided that these students also complete all requirements for the subject matter program (not necessarily the credential) by September 1, 2004.
- (2) Students who have not completed any courses in an old program by September 1, 2001, should be advised that after that date they should not take courses that are part of the old program (unless those courses are also a part of a new program). Instead, they should enroll in courses that are part of the new program. In many cases, the two programs will have some courses in common.
- (3) It may be necessary for some students to enroll in “new program courses” prior to the approval of the new program. Institutions may recommend these students for Single Subject Teaching Credentials even if the students have completed part of a new program prior to Commission approval of that program.

Once the Commission approves a new subject matter program, students who have already taken courses that are part of that program may continue to take courses in the program and complete the program even though they started taking courses before the program was approved by the Commission. Because of the flexibility of this policy, institutions should not expect to see any change in the September 1, 2001 date for the implementation of subject matter programs under the standards in this handbook.

Implementation Timeline Diagram

March 2000

Colleges and universities may begin to present program proposals for review by the Commission's Subject Matter Program Review Panel.

2000-2001

Once a program is approved under the standards, students who were not previously enrolled in the old program should enroll in the new program.

September 1, 2001

After this date, no new students should enroll in an old program, even if a new program in health science is not yet available at the institution.

2001-2002 and 2002-2003

The Commission will continue to review program proposals. Prior to the approval of new programs, students may enroll in "new program courses" that meet the standards.

September 1, 2004

Final date for candidates to complete subject matter programs that were approved under the Commission's old guidelines (adopted in 1983).

Implementation Handbook: Review and Approval of Subject Matter Programs in Health Science

A regionally accredited institution of postsecondary education that would like to offer (or continue to offer) a Program of Subject Matter Preparation for the Single Subject Credential in Health Science may present a program proposal that responds to the standards and preconditions in this handbook. The submission of programs for review and approval is voluntary for colleges and universities; candidates can qualify for the Single Subject Credential by passing a standardized assessment of their health science knowledge and competence.

For a subject matter program in health science to be approved by the Commission, it must satisfy the preconditions and standards in this handbook. If an institution would like to offer two or more distinct programs of subject matter preparation in health science, a separate proposal should be forwarded to the Commission for each program. For example, one program in health science might have a concentration in disease prevention, while a second program at the same institution could be a more general program without a particular concentration.

The Commission is prepared to review subject matter program proposals beginning on March 1, 2000. Prior to that date, the Commission's professional staff is available to consult with institutional representatives, and to do preliminary reviews of draft proposals (see page 49 for details).

Initial Statement of Institutional Intent

To assist the Commission in planning and scheduling reviews of program proposals, each institution is asked to file a Statement of Intent at least four months prior to submitting a proposal. Having received a timely Statement of Intent, the Commission will make every effort to review a proposal expeditiously. In the absence of a timely statement, the review process will take longer.

The Statement of Intent should be signed by the individual with chief responsibility for academic programs at the institution. It should provide the following information:

- The subject for which approval is being requested (health science).
- The contact person responsible for each program (include phone number).
- The expected date when students would initially "enroll" in each program.
- An indication as to whether or not the institution expects to submit a program for "informal" review (defined below).
- The date when each program will be submitted for formal review and approval.

If an institution plans to submit proposals for two or more programs in health science, the Statement of Intent should include this essential information for each program, and should indicate whether or not the programs will have distinct emphases.

The Program Proposal Document

For each program, the institution should prepare a program proposal that includes a narrative response to each precondition and standard on pages 13 through 31. Please provide six (6) copies of each program document.

Preconditions. A narrative section of the proposal should explain how the program will meet each precondition on page 13. In responding to the preconditions, the document must show the title and unit value of each required and elective course in the basic core component of the program (Precondition 2) and the same information about each course in the breadth and perspective component (Precondition 3). The proposal must also include brief course (catalog) descriptions of all required and elective courses.

Standards. In the major part of the program document, the institution should respond to each Standard of Program Quality and Effectiveness on pages 14 through 31. It is important to respond to each element of a standard, but a lengthy, detailed description is not necessary. Examples of how particular elements of the standard are accomplished are particularly useful. An institution's program proposal should include syllabi of required and selected elective courses, along with other supporting documentation to serve as "back-up" information to substantiate the responses to particular standards.

Factors to Consider. A program proposal must show how the program will meet each standard. The purpose of factors to consider is to amplify specific aspects of standards, and to assist institutions in responding to all elements of a standard. The Commission considers the factors to be important aspects of program quality, but it is not essential that the document respond to every factor. The factors are *not* "mini-standards," and there is *no expectation* that a program must meet all the factors in order to fulfill a standard. (For added information about factors to consider, please see pages 6 and 12.)

Institutions are urged to *reflect on* the factors to consider, which may or may not be used as the "organizers" or "headings" for responding to a standard. Institutions are also encouraged to describe all aspects of the program's quality, and not limit their responses to the adopted factors in this handbook. The quality of a proposal may be enhanced by information about "additional factors" that are related to the standards but do not coincide with any of the adopted factors.

Steps in the Review of Programs

The Commission is committed to conducting a program review process that is objective, authoritative and comprehensive. The agency also seeks to be as helpful as possible to colleges and universities throughout the review process.

Preliminary Staff Review. Before submitting program proposals for formal review and approval, institutions are encouraged to request preliminary reviews of *draft* documents by the Commission's professional staff. The purpose of these reviews is to assist institutions in developing programs that are consistent with the intent and scope of the standards, and that will be clear and meaningful to the external reviewers. Program documents may be submitted for preliminary staff review at any time; the optimum time is at least one month after submitting the Statement of Intent and at least two months prior to the expected date for submitting a completed proposal. Preliminary review is voluntary; its purpose is to assist institutions in preparing program documents that can be reviewed most expeditiously in the formal review process.

Review of Preconditions. An institution's response to the preconditions is reviewed by the Commission's professional staff because the preconditions are based on state laws and regulations, and do not involve issues of program quality. If the staff determines that the program complies with the requirements of state laws and administrative regulations, the program is eligible for a quality review (based on the standards) by a panel of subject matter experts. If the program does not comply with the preconditions, the staff returns the proposal to the institution with specific information about the lack of compliance. Such a proposal may be resubmitted once the compliance issues have been resolved. In a few circumstances, the staff may seek the advice of the Subject Matter Program Review Panel concerning the appropriateness of proposed coursework to meet a particular precondition.

Review of Program Quality Standards. Unlike the preconditions, the standards address issues of program quality and effectiveness, so each institution's response to the standards is reviewed by a small Program Review Panel of subject matter experts. During the review process, there is an opportunity for institutional representatives to meet with the panel to answer questions or clarify issues that may arise. Prior to such a discussion, the panel will be asked to provide a preliminary written statement of the questions, issues or concerns to be discussed with the institutional representative(s).

If the Program Review Panel determines that a proposed program fulfills the standards, the Commission's staff recommends the program for approval by the Commission during a public meeting no more than eight weeks after the panel's decision.

If the Program Review Panel determines that the program does not meet the standards, the document is returned to the institution with an explanation of the panel's findings. Specific reasons for the panel's decision are communicated to the institution. If the panel has substantive concerns about one or more aspects of program quality, representatives of the institution can obtain information and assistance from the Commission staff. With the staff's prior authorization, the college or university may also obtain information and assistance from one or more designated members of the panel. After changes have been made in the program, the proposal may be resubmitted to the Commission's staff for reconsideration by the panel.

If the Program Review Panel determines that minor or technical changes should be made in a program, the responsibility for reviewing the resubmitted proposal rests with the Commission's professional staff, which presents the *revised* program to the Commission for approval without further review by the panel.

Appeal of an Adverse Decision. An institution that would like to appeal a decision of the staff (regarding preconditions) or the Program Review Panel (regarding standards) may do so by submitting the appeal to the Executive Director of the Commission. The institution should include the following information in the appeal:

- The original program proposal, and the stated reasons of the Commission's staff or the review panel for not recommending approval of the program.
- A specific response by the institution to the initial denial, including a copy of the resubmitted document (if it has been resubmitted).
- A rationale for the appeal by the institution.

The Executive Director may deny the appeal, or appoint an independent review panel, or present the appeal directly to the Commission for consideration.

Responses to Six Common Standards

The Commission adopted six standards for programs in *all* single subject disciplines.

- Standard 1 - Program Philosophy and Purpose
- Standard 12 - Diversity and Equity in the Program
- Standard 13 - Coordination of the Program
- Standard 14 - Student Advisement and Support
- Standard 15 - Assessment of Subject Matter Competence
- Standard 16 - Program Review and Development

These six standards are referred to as common standards because they are essentially the same in all subject areas.

An institution's program proposal in health science should include subject-specific responses to Standards 1 and 12, along with subject-specific responses to the other curriculum standards in Category I (see pages 15 through 26). An institution's program proposal in health science *may* also include a unique response to Standards 13, 14, 15, and 16. Alternatively, the institution *may* submit a "generic response" to these four common standards. In a generic response, the institution should describe how subject matter programs in all subjects will meet the four standards. A generic response should include sufficient information to enable an interdisciplinary panel of reviewers to determine that the four common standards are met in each subject area. Once the institution's generic response is approved, it would not be necessary to respond to the four standards in the institution's program proposal in health science, or in any other subject.

Selection, Composition and Training of Program Review Panels

Review panel members are selected because of their expertise in health science, and their knowledge of health science curriculum and instruction in the public schools of California. Reviewers are selected from institutions of higher education, school districts, county offices of education, organizations of health science education experts, and other professional organizations. Members are selected according to the Commission's adopted policies that govern the selection of panels. Members of the Commission's Teacher Preparation and Assessment Advisory Panels may be selected to serve on Program Review Panels.

In health science, each program proposal is reviewed by at least one professor of health science, at least one secondary school teacher of health science, and a third Review Panel member who is either another professor, or another teacher, or a curriculum specialist in health science.

The Program Review Panel is trained by the Commission's staff. Training includes:

- The purpose and function of subject matter preparation programs.
- The Commission's legal responsibilities in program review and approval.
- The role of the review panel in making program determinations.
- The role of the Commission's professional staff in assisting the panel.
- A thorough analysis and discussion of each standard and rationale.
- Alternative ways in which the standard could be met.
- An overview of review panel procedures.
- Simulated practice in reviewing programs.
- How to write program review panel reports.

The training also includes analysis of the Common Standards. The reviewers of health science programs are trained specifically in the consistent application of the subject-specific standards in health science.

Subject Matter Program Review Panel Procedures

The Subject Matter Program Review Panel meets periodically to review programs that have been submitted to the Commission during a given time period. Whenever possible, Review Panels in more than one subject meet at the same time and location. This enables institutional representatives to meet with reviewers in more than one subject area, if necessary.

Review Panel meetings usually take place over three days. Meetings typically adhere to the following general schedule:

- First Day - Review institutional responses to common standards. Preliminary discussion of responses to curriculum standards.
- Second Day - Thorough analysis of responses to curriculum standards. Prepare preliminary written findings for each program, and FAX these to institutions.
- Third Day - Meet with representatives of institutions to clarify program information, discuss preliminary findings and identify possible changes in programs. Prepare written reports that reflect the discussions with institutions.

Subject Matter Program Review Panel Reports

Normally, the Review Panel's written report is mailed to the institution within two weeks after the panel meeting. If the report is affirmative, the Commission's staff presents the report to the Commission during a public meeting no more than eight weeks after the panel's decision.

If the Review Panel report indicates that the program does not meet the standards, specific reasons for the panel's decision are included in the report. The institution should first discuss such a report with the Commission's staff. One or more designated members of the panel may also be contacted, but only after such contacts are authorized by the staff.

If the report shows that minor or technical changes are needed in a program, the Review Panel gives responsibility for reviewing the resubmitted proposal to the staff.

Further Information and Communications Related to Standards, Programs, and Program Reviews

Regional Workshops for Colleges and Universities

Following publication of this handbook, the Commission will sponsor regional workshops to assist institutions in understanding and implementing the new standards. The agenda for each workshop will include:

- Explanation of the intended meaning of the standards, according to a member of the Teacher Preparation and Assessment Advisory Panel.
- Explanation of the Commission's implementation plan, and description of the program review process.
- Answers to questions about the standards, and examples presented by panel members and others who are experienced in implementing standards.
- Opportunities to discuss subject-specific questions in small groups.

All institutions that plan to submit program proposals (or are considering this option) are welcome to participate in the workshops. Specific information about the workshop dates and locations is provided separately from this handbook.

Communications with the Commission's Staff and Program Review Panel

The Commission would like the program review process to be as helpful as possible to colleges and universities. Because a large number of institutions prepare teachers in California, representatives of an institution should first consult with the Commission's professional staff regarding programs that are in preparation or under review. The staff responds to all inquiries expeditiously and knowledgeably. Representatives of colleges and universities should contact members of a Subject Matter Program Review Panel only when they are authorized to do so by the Commission's staff. This restriction must be observed to ensure that membership on a panel is manageable for the reviewers. If an institution finds that needed information is not sufficiently available, please inform the designated staff consultant. If the problem is not corrected in a timely way, the executive director of the California Commission on Teacher Credentialing should be contacted.

Request for Assistance from Handbook Users

The Commission welcomes comments about this handbook, which should be addressed to:

California Commission on Teacher Credentialing
Professional Services Division
1900 Capitol Avenue
Sacramento, California 95814-4213